

REMARKS

Applicant thanks the Examiner for acknowledging Applicant's claim to foreign priority under 35 U.S.C. § 119(a)-(d), and for confirming that the certified copy of the priority document has been received at the Patent Office.

Drawings:

Applicant thanks the Examiner for indicating that the drawings filed on June 25, 2001 have been approved.

Claim Objections:

Claim 43 has been objected because it depends on claim 22, which has been cancelled. Claim 43 has been amended as shown in the attached Appendix to depend on claim 28.

Allowable Subject Matter:

Applicant would like to thank the Examiner for indicating that claims 2-18, 21 and 25-27 are allowed. Applicant would also like to thank the Examiner for indicating that although claims 32, 35 and 46-50 have been objected to, these claims would be allowable if written in independent form.

In response thereto, Applicant has written claims 32 and 35 in independent form. Additionally, Applicant has written claim 46 in independent form. Therefore, Applicant submits that these claims are also now allowable.

Claim Rejections:

Claims 2-18, 21, 23 and 25-57 are all of the claims pending in the present application, and currently all of the claims 23, 28-31, 33, 34, 36-45 and 51-57 stand rejected.

As an initial matter, Applicant notes that claims 23, 44 and 51-57 have been cancelled without prejudice or disclaimer.

35 U.S.C. § 102(e) Rejection - Claims 23, 44, 51 to 57:

Claims 23, 44 and 51-57 stand rejected under 35 U.S.C. § 102(e) as being unpatentable over the newly applied U.S. Patent No. 6,377,813 to Kansakoski et al. As these claims have been cancelled without prejudice or disclaimer, Applicant submits that the above rejection is now moot.

35 U.S.C. § 28-31, 34 and 38-42:

Claims 28-31, 34 and 38-42 stand rejected under 35 U.S.C. § 102(e) as being anticipated by the Vembu reference. In view of the following discussion, Applicant respectfully disagrees.

As discussed in Applicant's previous amendments and responses, the Vembu system uses the measured or detected signal-to-noise ratio (SNR) determine which control mode is to be triggered, either a burst or tracking mode. When the SNR is at the proper level, nothing is done, when the SNR is high the signal is adjusted down, and when the SNR is low the control algorithm determines if a quick burst of signal is needed (burst mode) or a gradual increase is needed (tracking mode). However, what is important to note in all of the above scenarios is that the SNR value used is the actual measured or detected SNR value. Neither the SNR value, nor the threshold value are estimated in the Vembu system. Thus, the system disclosed in Vembu, and the system of the present invention have significant differences in their operation.

As an initial matter, Applicant has not found, nor has the Examiner identified any point in Vembu where an "estimation" is performed. In attempting to satisfy this feature, of the present invention, the Examiner has stated that the claim language "regularly estimating if a criterion is

met” is disclosed because Vembu determines when the “received signal-to-noise ratio is below a nominal level.” *See* Office Action dated March 12, 2002, page 3, para. 3 (emphasis added). The Examiner has also stated that this claim language is satisfied because in Vembu, “[t]he criterion is met if the SNR is greater than a desired nominal value.” *See* Office Action dated July 16, 2001, page 9, para. 9 (emphasis added). However, as the Examiner’s language makes clear Vembu only uses an actual determination of the SNR compared to a threshold value to determine whether or not to use the tracking mode, burst mode, or no mode at all. As the Examiner has admitted, Vembu controls the modes based on whether or not the SNR “is greater” than or “is below” a certain threshold value. There is no estimation disclosed in Vembu in the performance of either of these steps. Applicant submits that the determination of a SNR value greater than or lower than a threshold value is not an “estimation.” Vembu does not disclose “estimating whether or not the SNR is greater than or lower than a value, Vembu determines whether or not the SNR “is” greater than or less than a threshold value. Applicant submits that these are not the same.

Therefore, it is the Applicant’s position that Vembu only discloses detecting or measuring the SNR and comparing it to a threshold value. No estimation takes place.

Additionally, Applicant notes that Vembu fails to disclose, teach or suggest a system where “wherein [the] de-activation includes performing a different type of algorithm than [the] power control algorithm, and wherein [the] different type of algorithm includes an algorithm showing better performances than [the] different type of algorithm in fast changing environments

and/or high mobile speed.” *See* claim 28. There is no disclosure within Vembu of employing an algorithm which performs better in fast changing environments and/or at a high mobile speed.

As such, Applicant respectfully submits that Vembu fails to disclose, teach or suggest each and every feature of the present invention, as set forth in claim 28, and hereby requests the Examiner reconsider and withdraw the present 35 U.S.C. § 102(e) rejection of this claim, and its respective dependent claims.

Additionally and independently, with regard to claims 43 and 58, Applicant notes that the Examiner has admitted that Vembu discloses using only “closed loop algorithms” in its system. *See* Office Action dated August 15, 2002, page 3. Claim 43 recites, *inter alia*, that the de-activation is controlled by a different type of algorithm than that used for the power control algorithm, and that these algorithms are from a group comprising closed and open loop algorithms. Therefore, in the present invention as recited in claim 43, if one algorithm is of a closed loop type then the other must be an open loop type, and vice-versa. As admitted by the Examiner, this is not the case in Vembu, as they are both closed loop algorithms.

Conclusion:

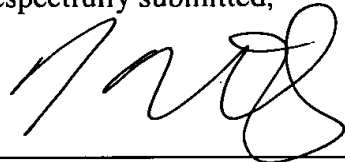
In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

AMENDMENT UNDER 37 C.F.R. § 1.116
U.S. Application No.: 09/287,264

Our Ref.: Q53917
Art Unit: 2682

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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APPENDIX
VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

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Claims 23, 44 and 51-57 are canceled.

The claims are amended as follows:

28. (Twice Amended) A method for improving performances of a mobile radiocommunication system using a power control algorithm, said method comprising:

regularly estimating if a criterion is met as to whether said power control algorithm should better be de-activated; and

de-activating said power control algorithm if said criterion is met,

wherein said de-activation includes performing a different type of algorithm than said power control algorithm, and

wherein said different type of algorithm ~~and said other algorithm are chosen in a group comprising closed loop power control algorithms and open loop power control algorithms~~ includes an algorithm showing better performances than said different type of algorithm in fast changing environments and/or high mobile speed.

32. (Amended) A method for improving performances of a mobile radiocommunication system using a power control algorithm, said method comprising:

regularly estimating if a criterion is met as to whether said power control algorithm should better be de-activated; and

de-activating said power control algorithm if said criterion is met,

wherein said de-activation includes performing a different type of algorithm than said power control algorithm,

wherein said algorithm and said other algorithm are chosen in a group comprising closed-loop power control algorithms and open-loop power control algorithms, and
method according to claim 31,

wherein said estimation as to whether said criterion is met is based on an estimation of a deviation value, representative of a deviation between an estimated transmission quality and a target transmission quality, and

wherein said estimation as to whether said criterion is met includes:

- an estimation of a first deviation value, which would have been obtained if said power control algorithm had always been activated, on a given time-interval on which said deviation value is estimated,

- an estimation of a second deviation value, which would have been obtained if said power control algorithm had never been activated, on said given time-interval on which said deviation value is estimated,

- a choice between activation and de-activation of said algorithm depending on which of said first and second deviation values is the lowest.

35. (Amended) A method for improving performances of a mobile radiocommunication system using a power control algorithm, said method comprising:

regularly estimating if a criterion is met as to whether said power control algorithm should better be de-activated; and
de-activating said power control algorithm if said criterion is met,
wherein said de-activation includes performing a different type of algorithm than said power control algorithm,
wherein said algorithm and said other algorithm are chosen in a group comprising closed-loop power control algorithms and open-loop power control algorithms, and
wherein said estimation as to whether said criterion is met is based on an estimation of a deviation value, representative of a deviation between an estimated transmission quality and a target transmission quality, and~~A method according to claim 31,~~

wherein said estimated deviation value is represented by the variance of said estimated transmission quality.

43. (Amended) A method according to claim ~~22~~28, wherein said power control algorithm is one of a closed loop and open loop algorithm, and said different type of algorithm is the other of said closed loop or open loop algorithm.

46. (Amended) A method for improving performances of a mobile radiocommunication system using a power control algorithm, said method comprising:

regularly estimating whether a criterion is met as to whether said power control
algorithm should better not be performed, and
not performing any power control algorithm in accordance with a result of said
estimating step~~A method according to claim 23,~~

wherein said estimation as to whether said criterion is met is based on an
estimation of a deviation value, representative of a deviation between an estimated
transmission quality and a target transmission quality.

Claim 58 has been added.